

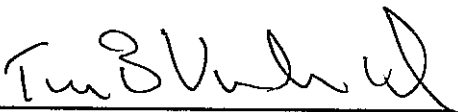
Report of Results: MVA5394

**Analysis of Settled Dust
744 P Street-OB9**

Prepared for:

**State of California
Dept of General Services
Seismic & Special Programs
707 West 3rd St.
West Sacramento, CA 95605**

Respectfully Submitted by:



**Tim B. Vander Wood, Ph.D.
Executive Director**

**MVA Scientific Consultants
3300 Breckinridge Boulevard
Suite 400
Duluth, GA 30096**

29 August 2007



Report of Results: MVA5394**Analysis of Settled Dust - 744 P Street-OB9****Introduction**

On 20 July 2007, we received five settled dust samples from Clark Sief Clark, reportedly collected from 744 P Street-OB9, Sacramento, California. We were asked to determine the asbestos levels in the dust and possible sources for the asbestos. Upon receipt, the samples were assigned MVA Scientific Consultants laboratory identification numbers as follows:

<u>Sample ID</u>	<u>Sample Description</u>	<u>MVA Number</u>
06-VA	4 th floor mechanical Rm, Top of electrical panel	S0837
07-VA	8 th floor-telephone closet top of junction conduit box	S0838
08.VA	10 th floor mechanical Rm, floor by air unit	S0839
09.VA	16 th FI telephone closet, Top of fiber optic box	S0840
10VA	17 th floor Telephone closet shelf	S0841

All analyses were carried out in our laboratory during the period 20 July through 29 August 2007.

Methods

The samples were analyzed according to ASTM Method D5755-03 using either a Philips model EM420 or a Philips model CM120 transmission electron microscope (TEM), equipped with an Oxford INCA energy dispersive x-ray spectrometer (EDS). Additional analyses for dust constituents that may serve as source indicators were also conducted by TEM/EDS.

Results and Discussion

The results of analysis for these samples are presented in Table 1. The Appendix contains a summary of the analytical results, the laboratory count sheets, and images and EDS spectra of typical asbestos fibers found in these samples. Also contained in the appendix are images and spectra showing vermiculite associated with chrysotile fibers and other asbestiform amphibole minerals typical of those known as "Libby amphibole" and observed as contaminants in vermiculite from the Libby, Montana vermiculite mine operated by W.R. Grace.



Conclusions

Dust analyzed in this study contains elevated levels of chrysotile asbestos. Portions of the dust are consistent with derivation from a chrysotile/vermiculite bearing fireproofing. Asbestiform amphibole consistent with "Libby amphibole" was also found, indicating that the vermiculite in this dust originated at least in part at W.R. Grace's Libby vermiculite mine.

Table 1. Asbestos Concentration in Settled Dust Samples

Sample ID	MVA Number	Asbestos Str/cm ²
06-VA	S0837	23,724,444
07-VA	S0838	15,630,222
08.VA	S0839	41,168,889
09.VA	S0840	775,309
10VA	S0841	418,667





Requested TAT (Circle One)	Same Day	One Day (24hr)	Normal (48hr)
Analysis Type (Circle One)	Air	Surface	Bulk Water

Project Name & Location:	Client Information:
W.R. Grace 244 P Street - DB 9 Sacramento CA	DGS Clean Energy

Client Information:

Sampling Area and/or Building #:

[illegible]

Relinquished By (Print & Sign)	Date & Time	Received By (Print & Sign)	Date & Time	Analysis By (Print & Sign)
FRANCO GED	7.19.07	RECEIVED	7/20/07	
Relinquished By (Print & Sign)	Date & Time	Received By (Print & Sign)	Date & Time	Analysis Date & Time

APPENDIX



ASTM D5755 Results**MVA 5394**

By: W.Hill

Client project number:

Str/cm = No Str. X CFA X Total Vol.

Grid Op. X GO Area X Vol Filt X Area Sampled

MVA #: S0837 **Client #:** 06.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
68	1256	4	0.009	0.1	100	100

Anal. Sens = 348888.889 Str/CM2 LOD =3* Anal. Sens = 1046666.667

Total = 23724444.444 Str/CM2

MVA #: S0838 **Client #:** 07.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
56	1256	5	0.009	0.1	100	100

Anal. Sens = 279111.111 Str/CM2 LOD =3* Anal. Sens = 837333.333

Total = 15630222.222 Str/CM2

MVA #: S0839 **Client #:** 08.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
118	1256	4	0.009	0.1	100	100

Anal. Sens = 348888.889 Str/CM2 LOD =3* Anal. Sens = 1046666.667

Total = 41168888.889 Str/CM2

MVA #: S0840 **Client #:** 09.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
50	1256	9	0.009	1	100	100

Anal. Sens = 15506.173 Str/CM2 LOD =3* Anal. Sens = 46518.519

Total = 775308.642 Str/CM2

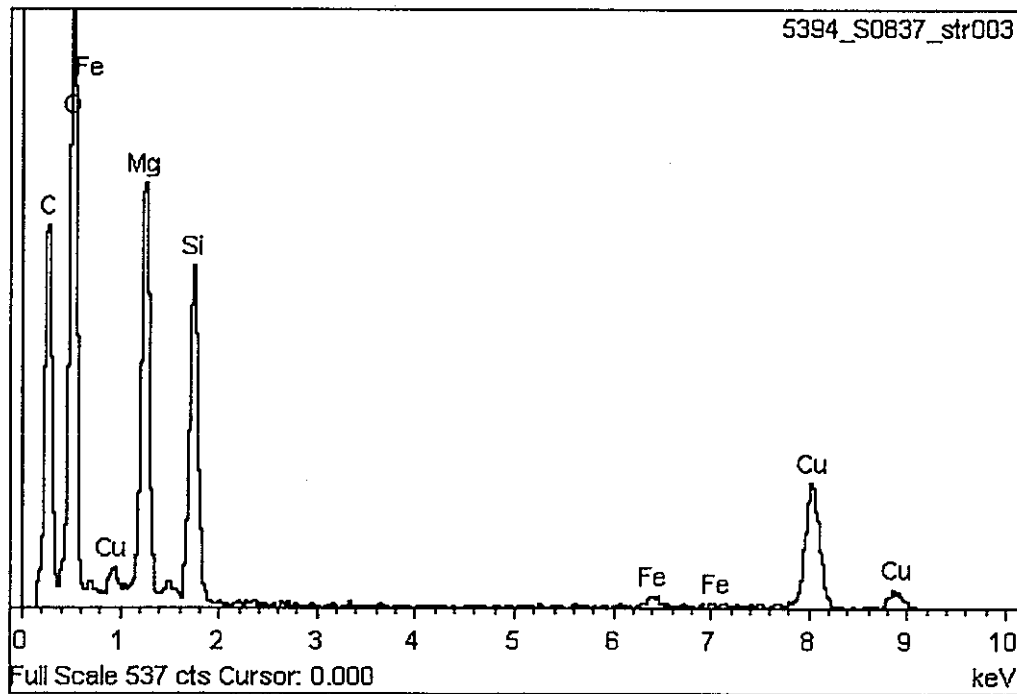
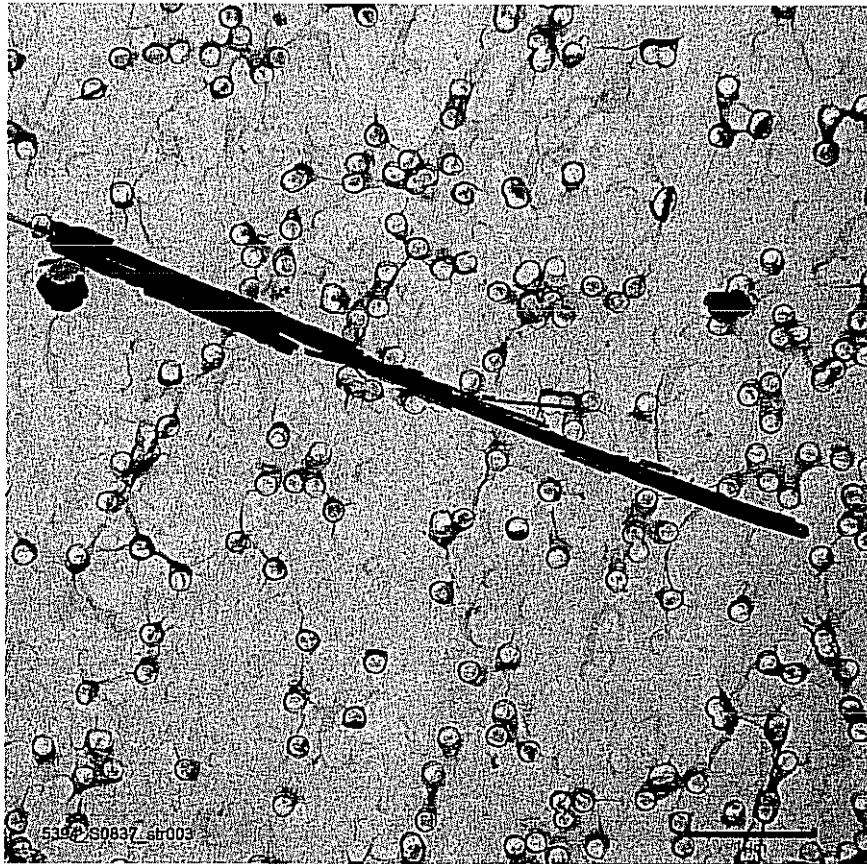
MVA #: S0841 **Client #:** 10.VA

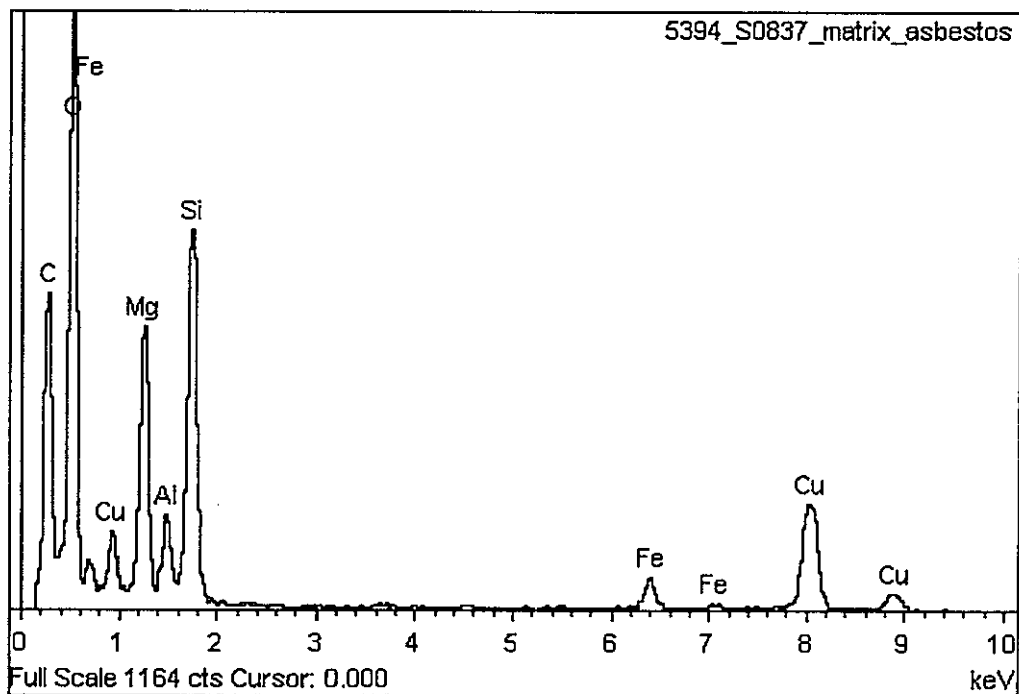
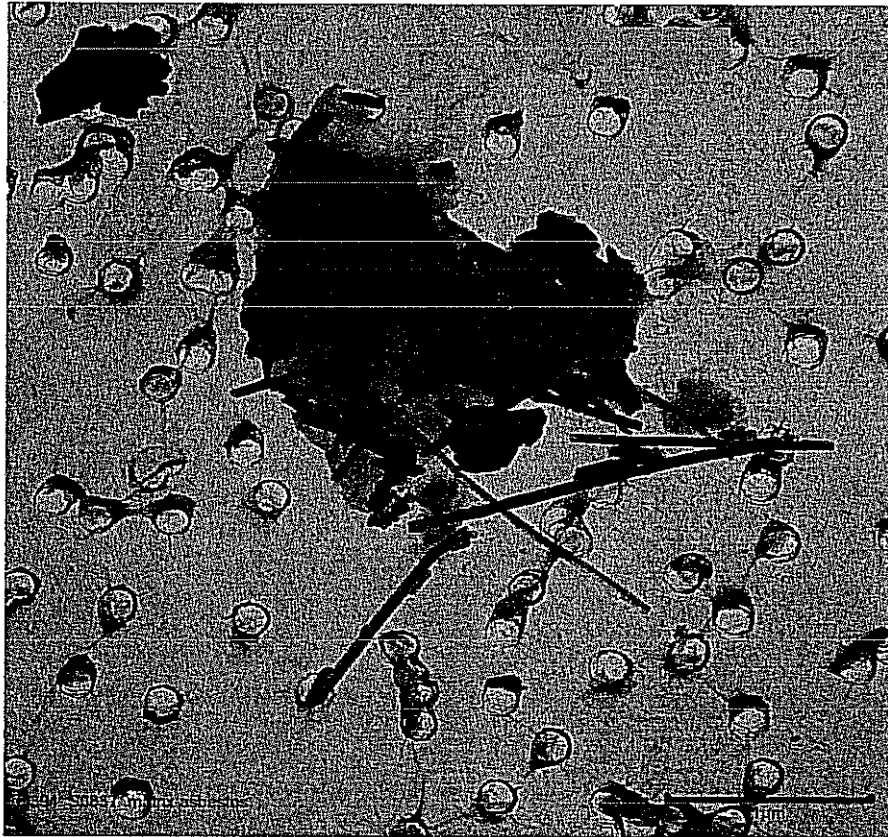
Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
3	1256	10	0.009	0.1	100	100

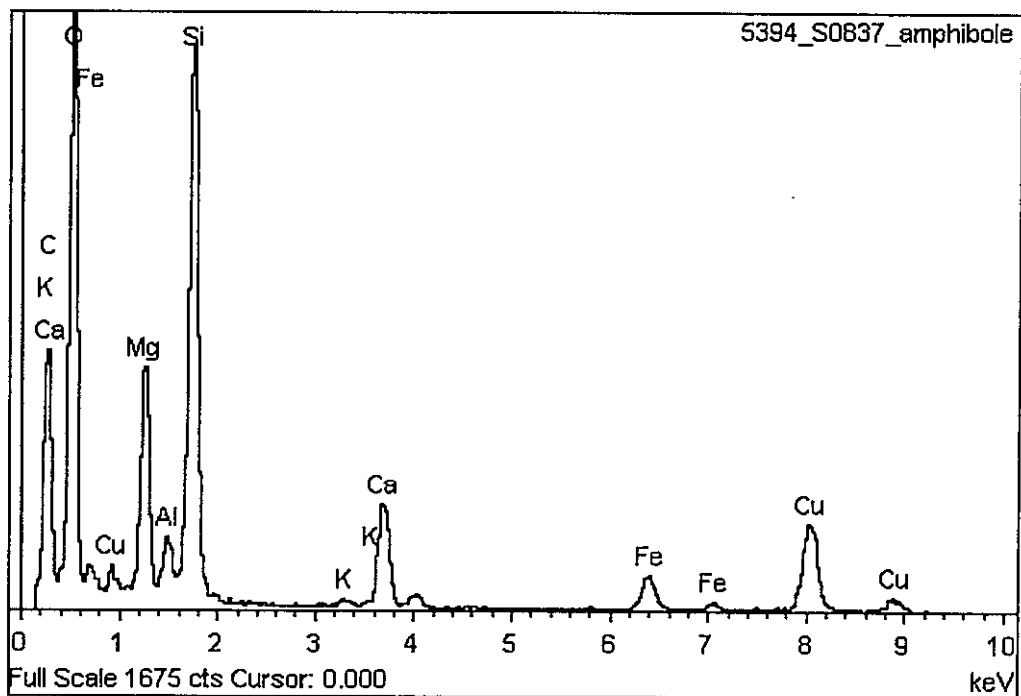
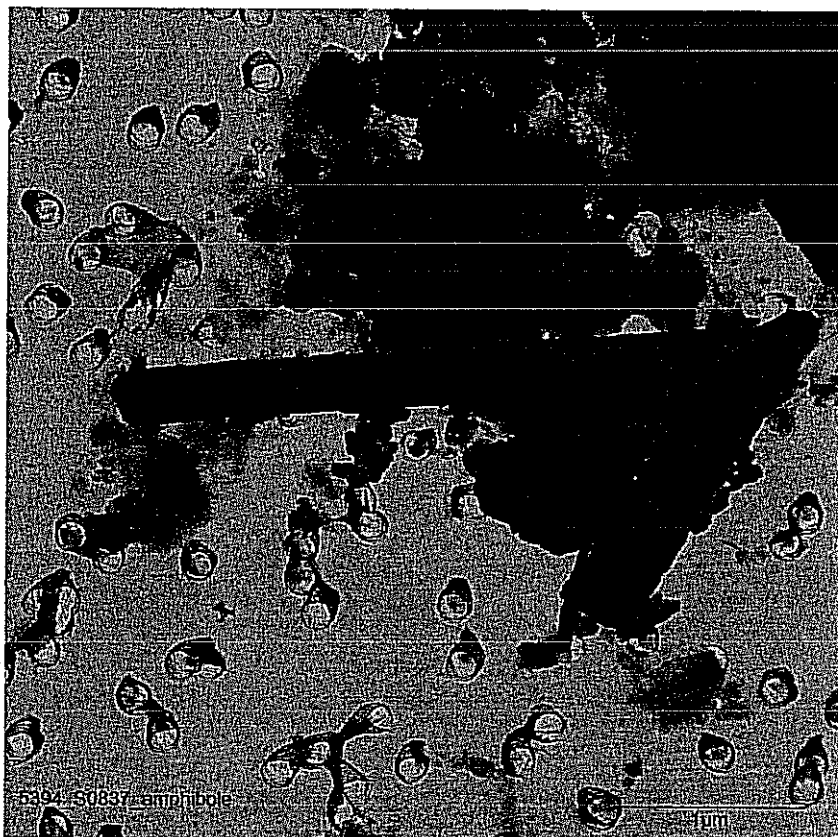
Anal. Sens = 139555.556 Str/CM2 LOD =3* Anal. Sens = 418666.667

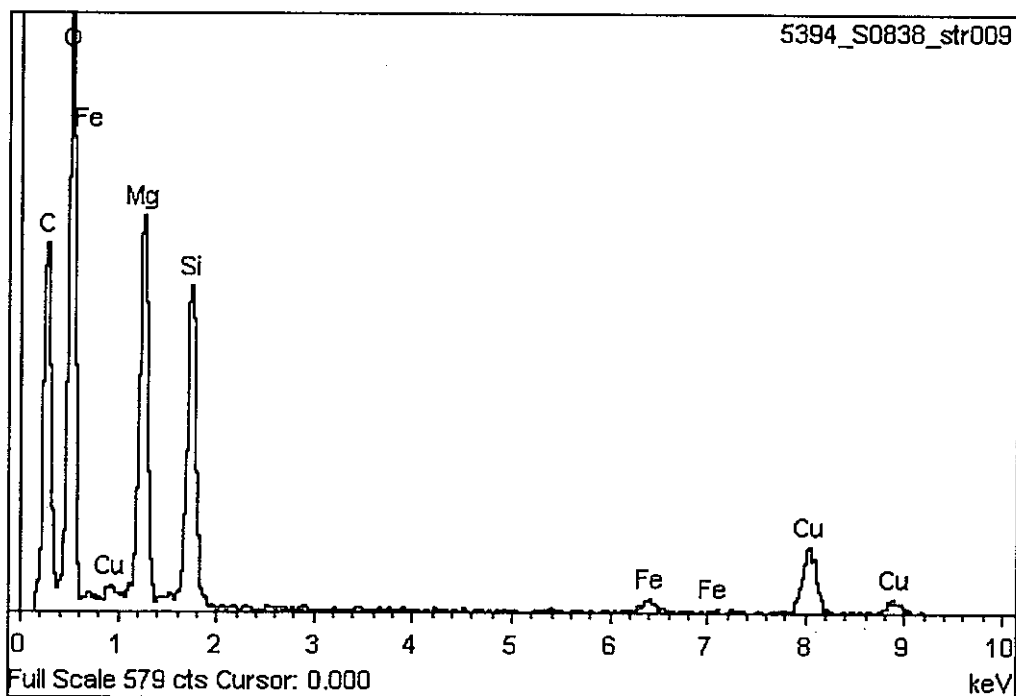
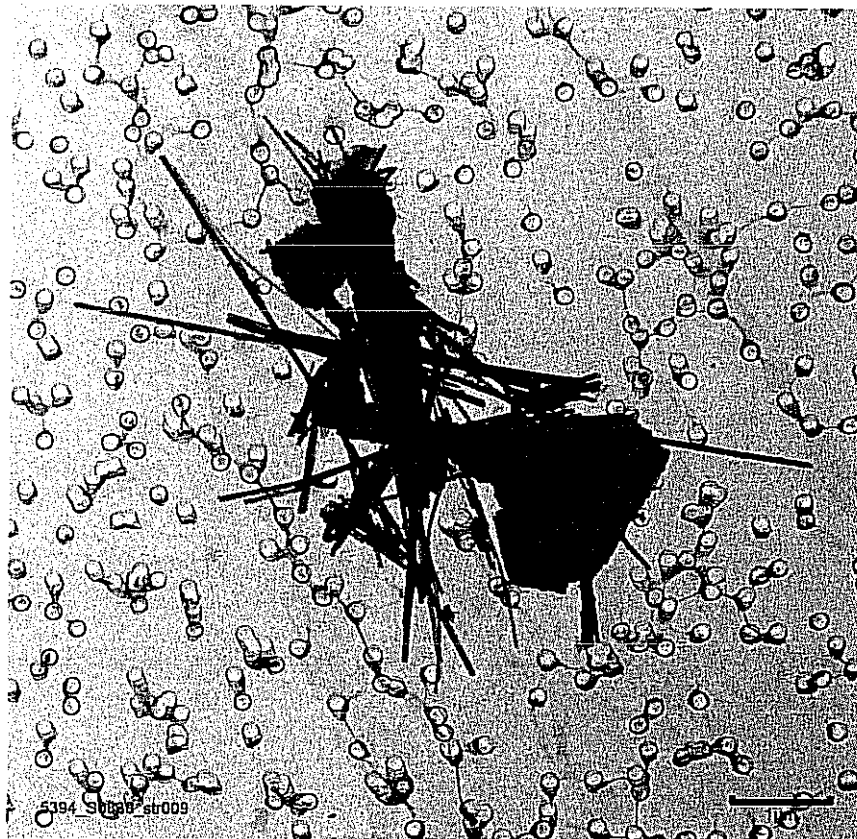
Total = 418666.667 Str/CM2

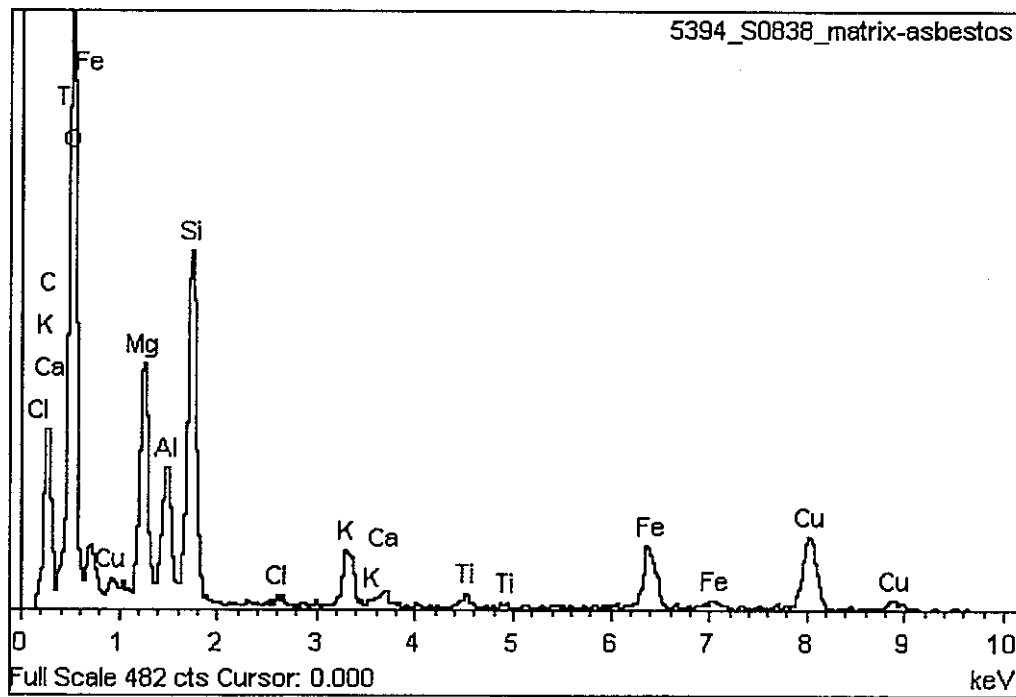
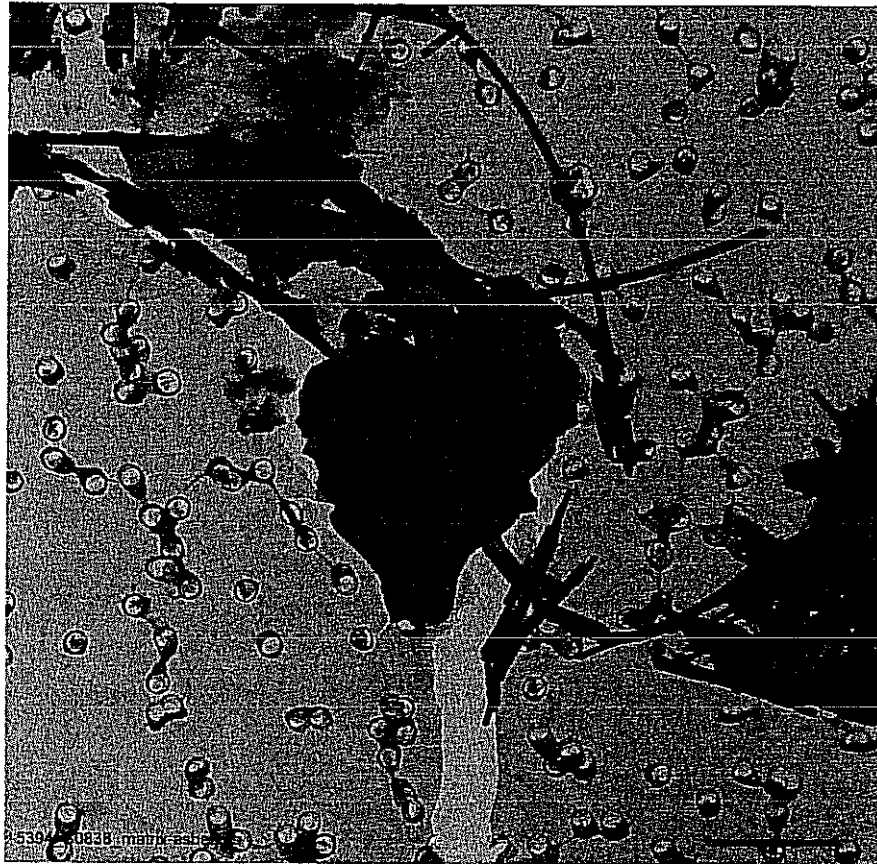
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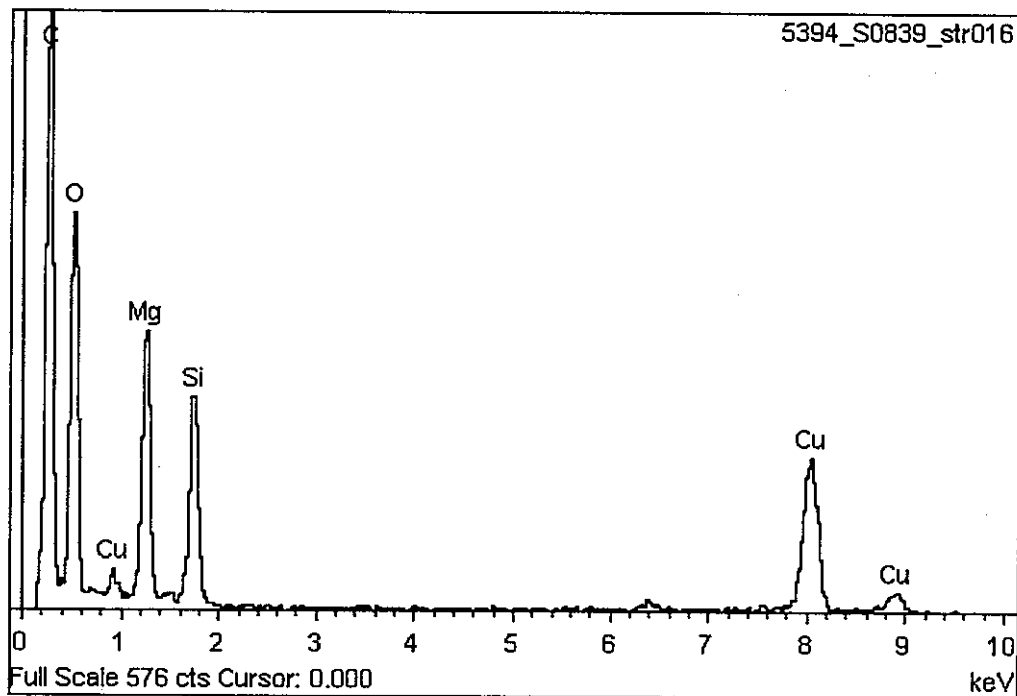
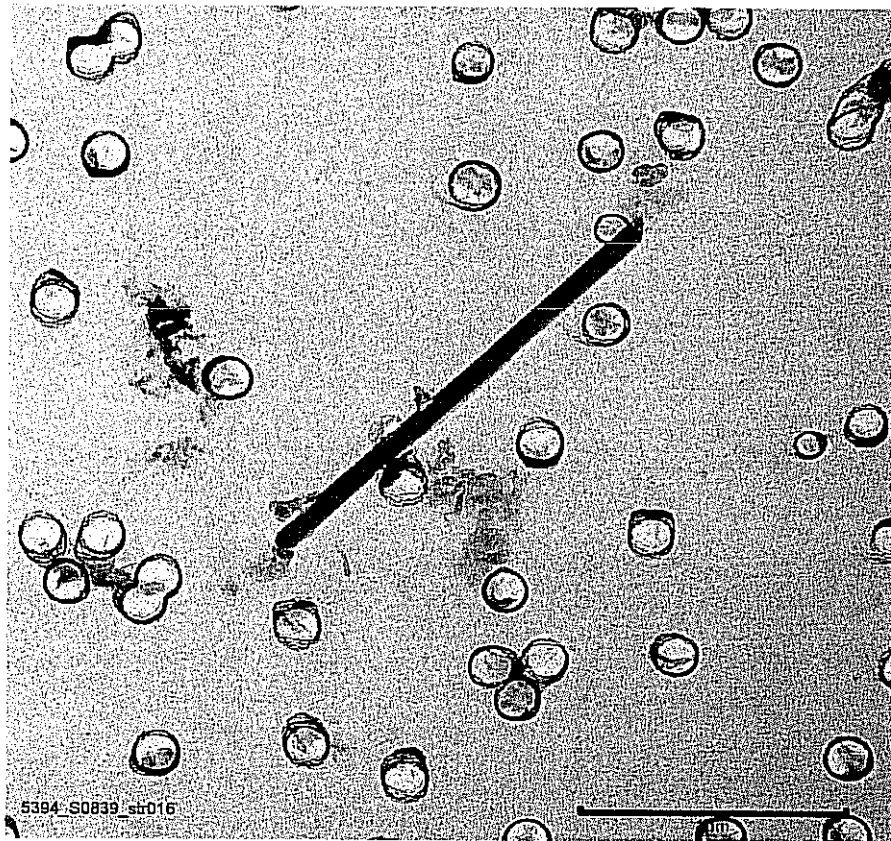


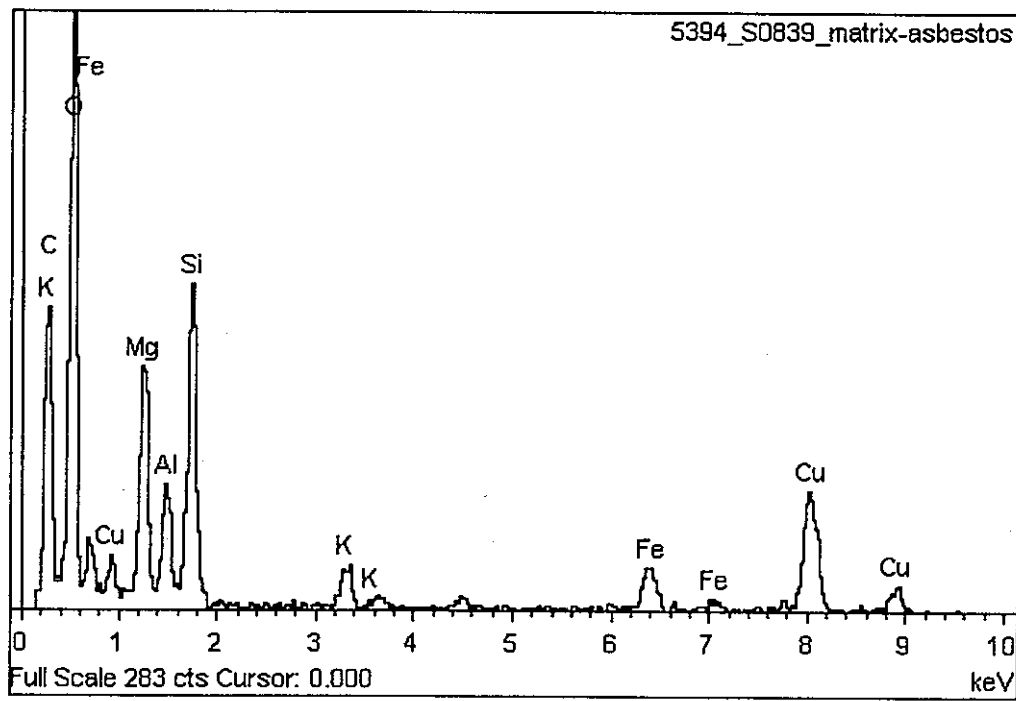
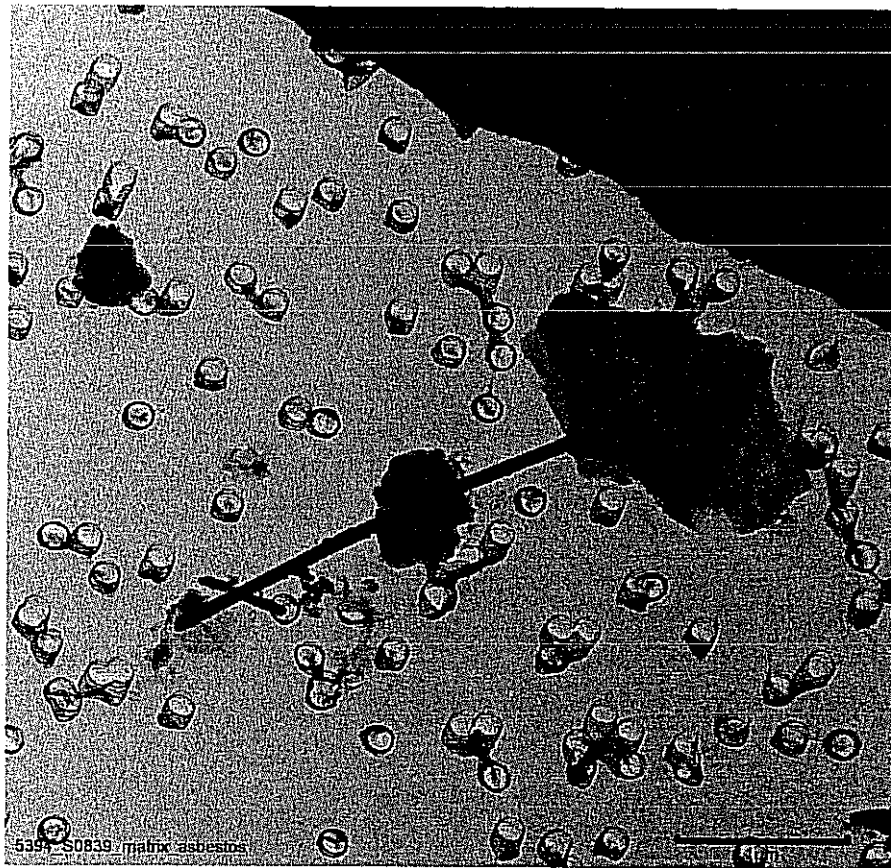


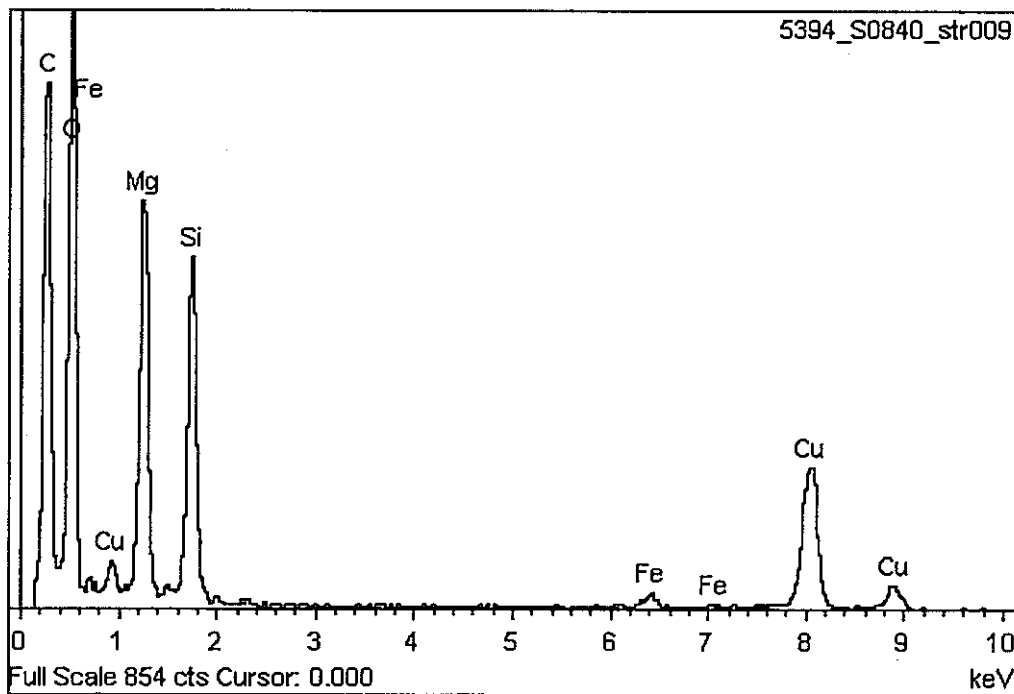
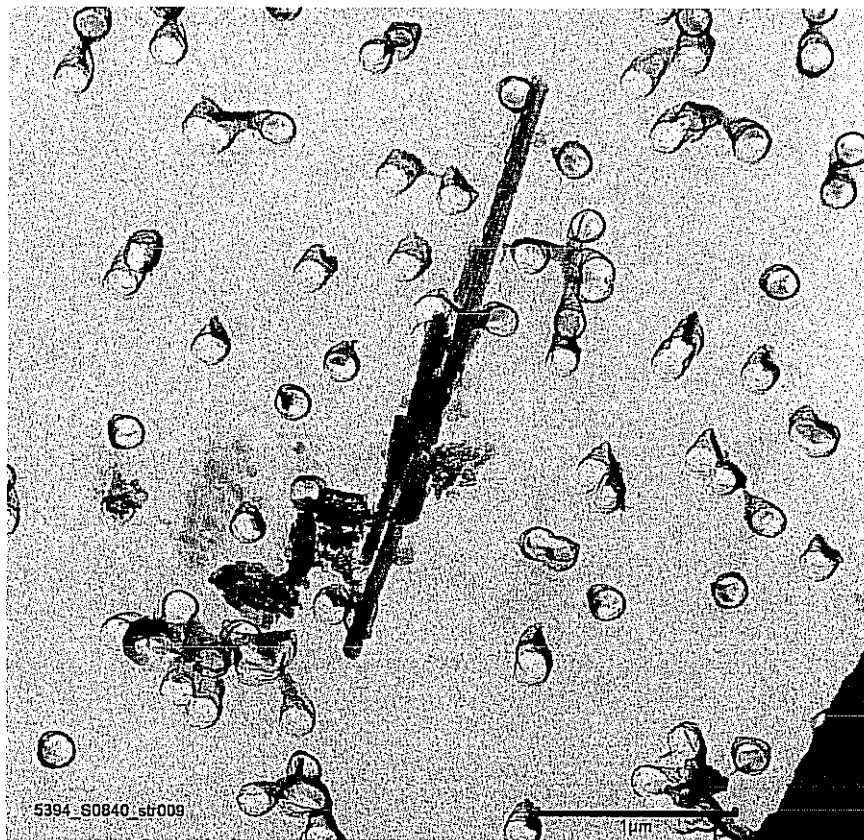


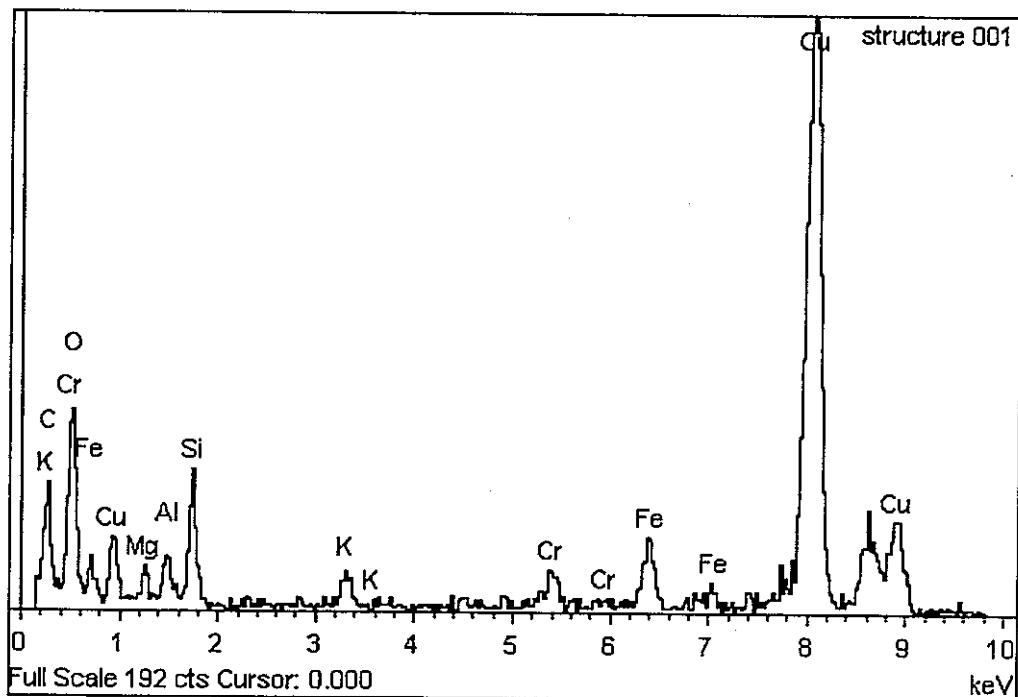
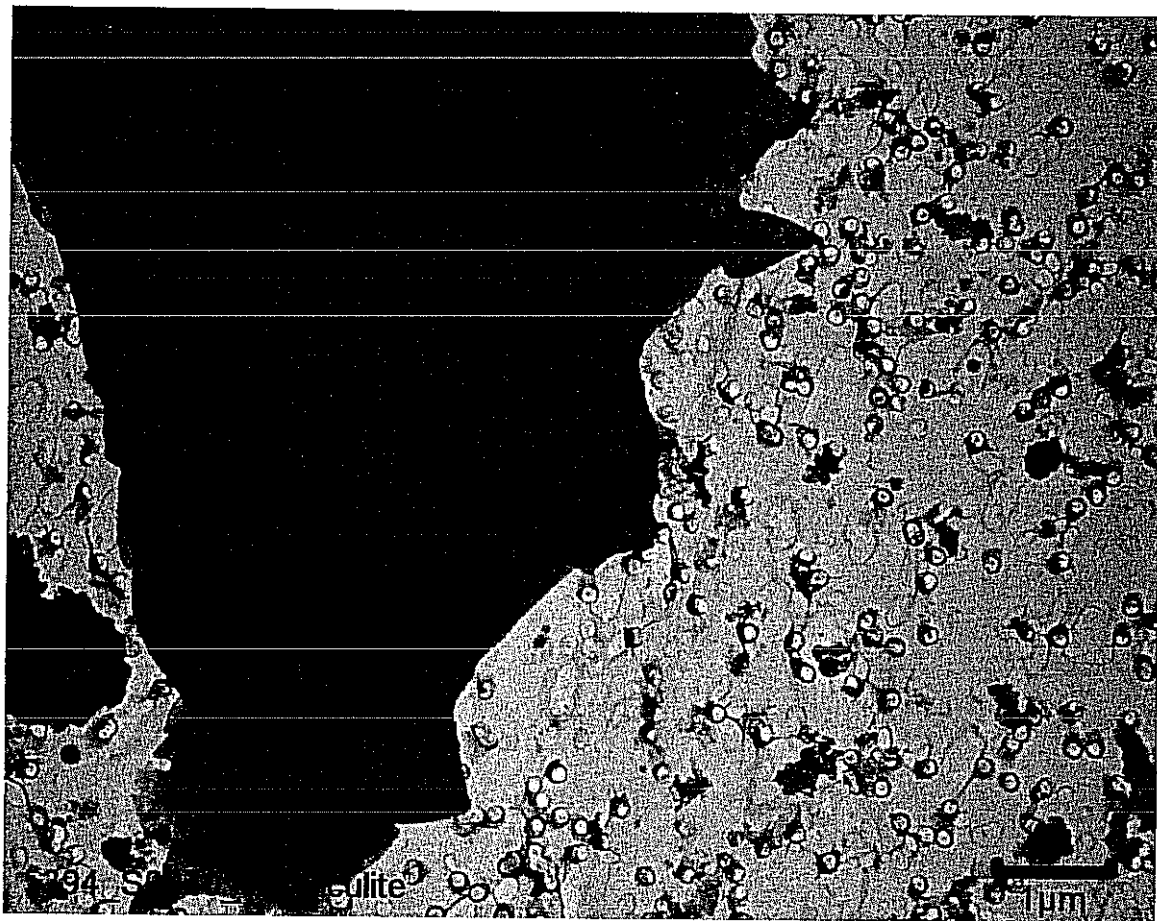


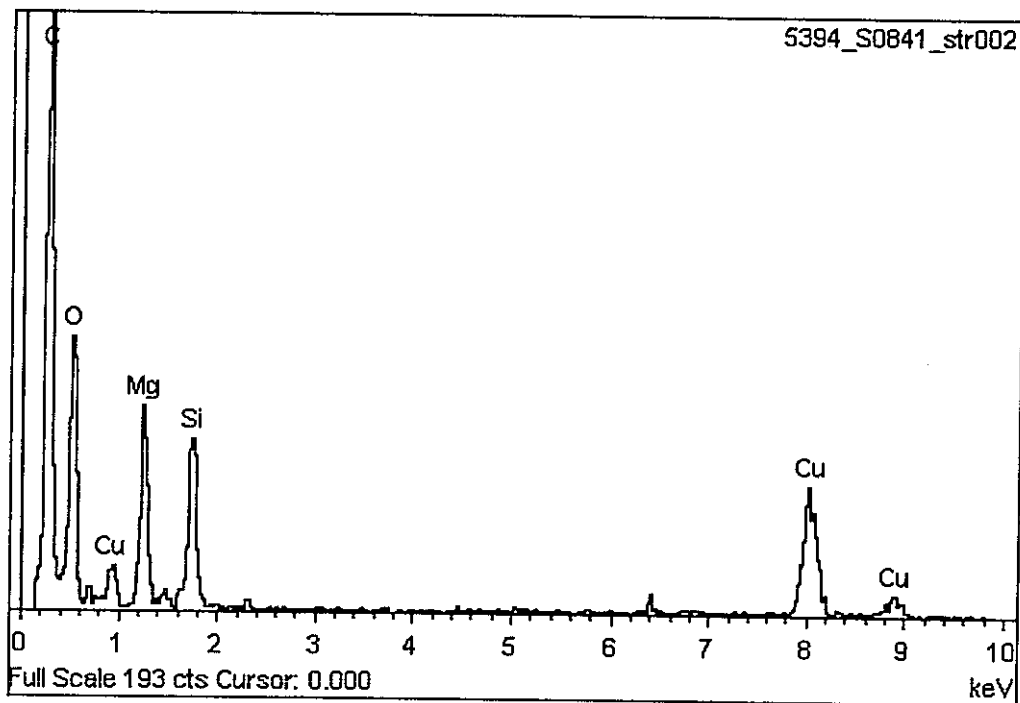
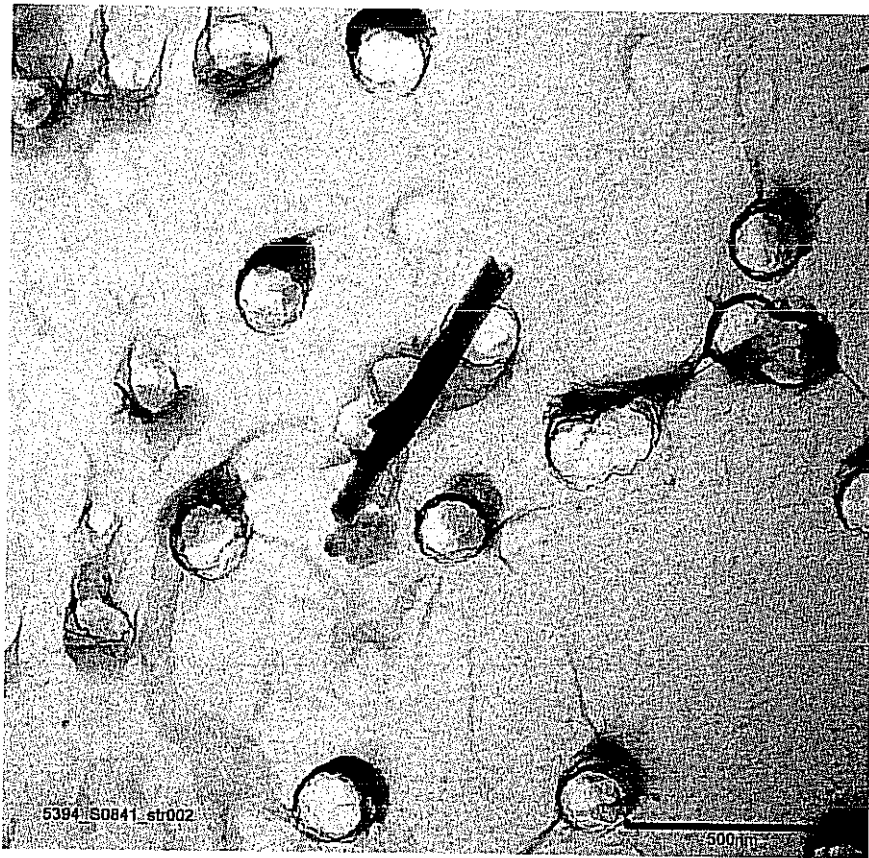


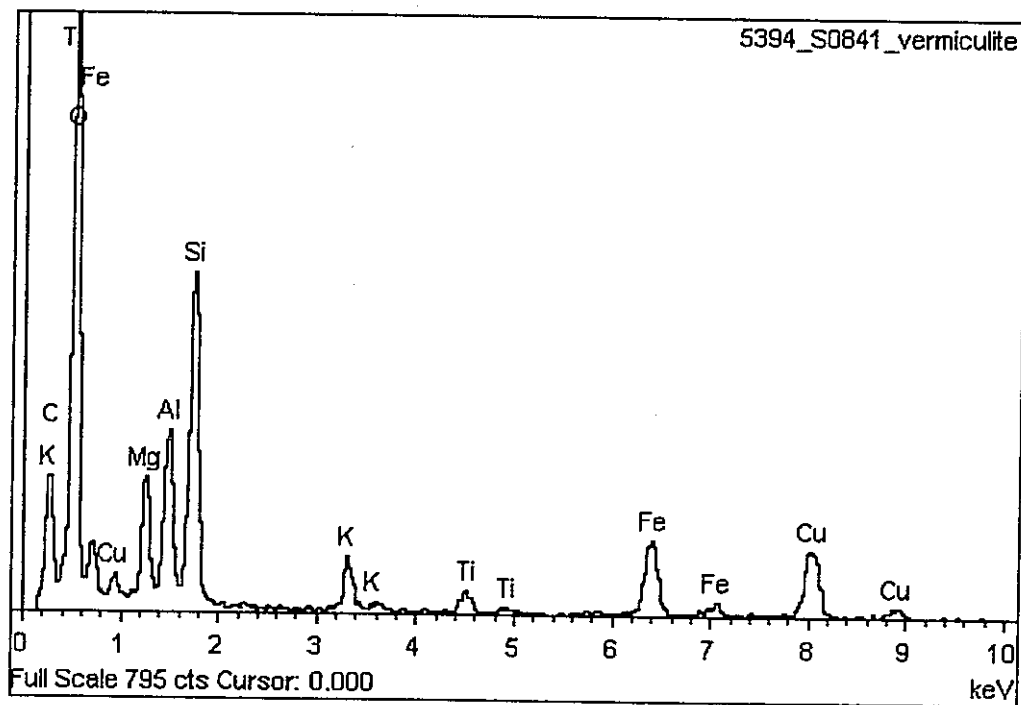
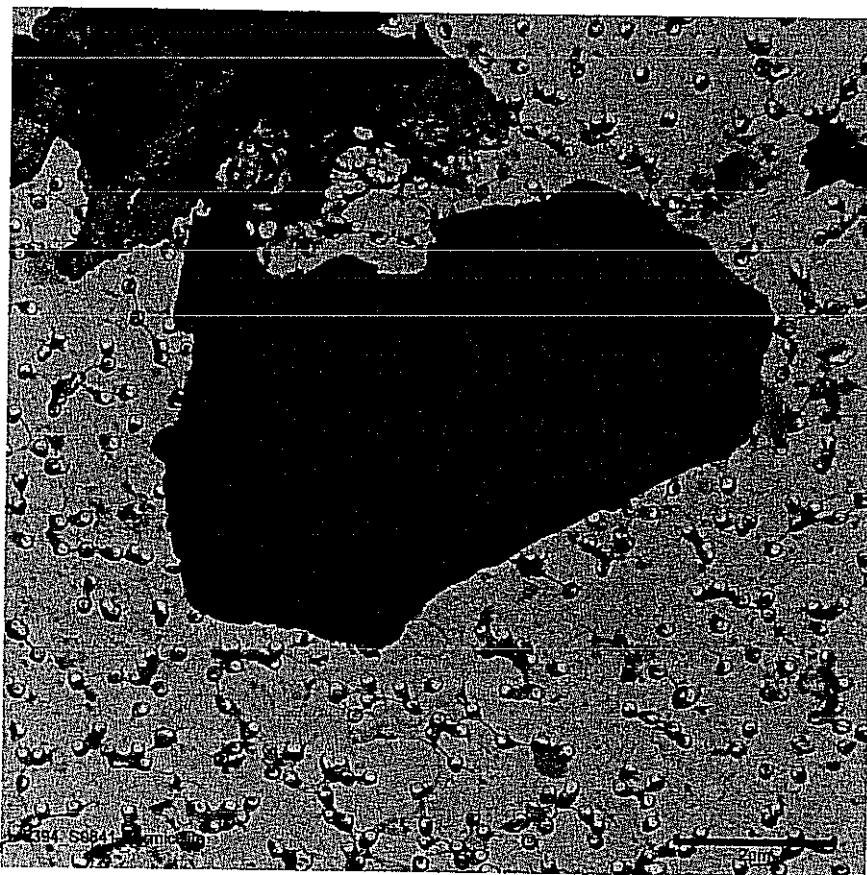












MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0837	Amt Prepped(cm ²):	0.1
Client I.D.:	06.VA	Filter Area (mm ²):	1256
Instrument:	Philips120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	4
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	7/31/2007
Page:	1 of 2
Comments:	0.1 ml
ASTM Method:	D6480
	or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	B2	1	M	2.5	0.15	C			1.0	0.06
		2	F	17.0	0.1	C			7.1	0.04
		3	B	16.0	0.5	C	C	Photo	6.7	0.21
		4	F	7.0	0.15	C			2.9	0.06
		5	F	3.1	0.15	C			1.3	0.06
		6	M	8.5	0.1	C			3.5	0.04
		7	F	4.0	0.1	C			1.7	0.04
		8	F	3.0	0.1	C			1.3	0.04
		9	F	7.5	0.15	C			3.1	0.06
		10	F	7.5	0.1	C			3.1	0.04
		11	M	2.5	0.1	C			1.0	0.04
		12	F	3.2	0.1	C			1.3	0.04
		13	C	6.5	0.3	C			2.7	0.13
		14	B	10.5	0.3	C			4.4	0.13
		15	F	2.6	0.1	C			1.1	0.04
		16	F	2.0	0.15	C			0.8	0.06
		17	F	2.5	0.1	C			1.0	0.04
		18	F	1.8	0.1	C			0.8	0.04
		19	F	5.2	0.1	C			2.2	0.04
	C4	20	F	1.8	0.1	C			0.8	0.04
		21	F	2.0	0.15	C			0.8	0.06
		22	F	6.0	0.1	C			2.5	0.04
		23	F	15.5	0.1	C			6.5	0.04
		24	F	2.5	0.1	C			1.0	0.04
		25	F	5.0	0.1	C			2.1	0.04
		26	F	5.0	0.1	C			2.1	0.04
		27	F	7.0	0.15	C			2.9	0.06
		28	F	15.0	0.1	C			6.3	0.04
		29	F	6.0	0.1	C			2.5	0.04
		30	F	4.0	0.15	C			1.7	0.06
		31	F	23.5	0.1	C			9.8	0.04
		32	F	2.5	0.15	C			1.0	0.06
		33	F	3.0	0.1	C			1.3	0.04
		34	F	2.0	0.1	C			0.8	0.04
		35	F	14.5	0.1	C			6.0	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0837	Amt Prepped(cm ²):	0.1
Client I.D.:	06.VA	Filter Area (mm ²):	1256
Instrument:	Philips120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	4
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	7/31/2007
Page:	2 of 2
Comments:	0.1 ml
ASTM Method:	D6480
	or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	C4	36	F	2	0.1	C			0.8	0.04
		37	F	3.5	0.1	C			1.5	0.04
	E1	38	F	5.0	0.1	C			2.1	0.04
		39	F	9.5	0.1	C			4.0	0.04
		40	F	9.5	0.15	C			4.0	0.06
		41	F	6.0	0.15	C			2.5	0.06
		42	F	5.8	0.1	C			2.4	0.04
		43	F	1.7	0.1	C			0.7	0.04
		44	F	1.6	0.1	C			0.7	0.04
		45	F	8.0	0.1	C			3.3	0.04
		46	F	3.5	0.1	C			1.5	0.04
		47	F	40.0	0.1	C			16.7	0.04
		48	B	6.5	0.5	C			2.7	0.21
		49	F	9.5	0.1	C			4.0	0.04
		50	F	5.4	0.1	C			2.3	0.04
		51	M	2.5	0.1	C			1.0	0.04
	G6	52	B	15.0	0.5	C			6.3	0.21
		53	F	4.5	0.1	C			1.9	0.04
		54	F	2.0	0.1	C			0.8	0.04
		55	B	34.5	0.15	C			14.4	0.06
		56	F	5.0	0.1	C			2.1	0.04
		57	F	3.5	0.15	C			1.5	0.06
		58	F	2.5	0.1	C			1.0	0.04
		59	F	8.0	0.1	C			3.3	0.04
		60	F	5.0	0.1	C			2.1	0.04
		61	F	3.5	0.1	C			1.5	0.04
		62	F	3.0	0.1	C			1.3	0.04
		63	F	11.5	0.1	C			4.8	0.04
		64	F	3.5	0.1	C			1.5	0.04
		65	F	12.0	0.7	C			5.0	0.29
		66	M	3.5	0.1	C			1.5	0.04
		67	F	5.0	0.1	C			2.1	0.04
		68	C	5.5	1	C			2.3	0.42

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0838	Amt Prepped(cm ²):	0.1
Client I.D.:	07.VA	Filter Area (mm ²):	1256
Instrument:	Philips 120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	5
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	7/31/2007
Page:	1 of 2
Comments:	0.1 ml
ASTM Method:	D6480
	or D5755 <u>X</u>

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	D2	1	F	4.5	0.1	C			1.9	0.04
		2	B	5.5	0.3	C			2.3	0.13
		3	B	8.0	0.5	C			3.3	0.21
		4	C	6.5	1	C			2.7	0.42
		5	F	3.0	0.2	C			1.3	0.08
		6	C	41.0	22.5	C			17.1	9.38
		7	F	5.5	0.1	C			2.3	0.04
		8	F	13.0	0.2	C			5.4	0.08
		9	C	17.5	13	C	C	photo	7.3	5.42
		10	F	10.5	0.1	C			4.4	0.04
		11	C	3.0	0.8	C			1.3	0.33
		12	F	2.5	0.1	C			1.0	0.04
		13	F	2.0	0.1	C			0.8	0.04
		14	F	2.0	0.1	C			0.8	0.04
		15	F	2.0	0.1	C			0.8	0.04
		16	C	90.0	45.5	C			37.5	18.96
		17	C	15.0	0.1	C			6.3	0.04
	G3	18	F	8.0	0.1	C			3.3	0.04
		19	C	131.5	88	C			54.8	36.67
		20	F	7.5	0.1	C			3.1	0.04
	E1	21	M	10.0	1.2	C			4.2	0.50
		22	B	6.0	0.2	C			2.5	0.08
		23	B	5.7	0.5	C			2.4	0.21
		24	B	2.5	0.4	C			1.0	0.17
		25	F	25.0	0.1	C			10.4	0.04
		26	F	14.0	0.1	C			5.8	0.04
		27	F	12.0	0.1	C			5.0	0.04
		28	C	6.0	1.5	C			2.5	0.63
		29	F	14.5	0.15	C			6.0	0.06
		30	M	2.1	0.15	C			0.9	0.06
		31	F	10.1	0.1	C			4.2	0.04
		32	C	23.5	7	C			9.8	2.92
		33	F	13.5	0.1	C			5.6	0.04
		34	M	2.2	0.1	C			0.9	0.04
	C5	35	F	2.5	0.15	C			1.0	0.06

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

5394report082907_744P

MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0839	Amt Prepped(cm ²):	0.1
Client I.D.:	08.VA	Filter Area (mm ²):	1256
Instrument:	Philips 120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	4
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	8/1/2007
Page:	1 of 4
Comments:	0.1 ml
ASTM Method:	D6480
	or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	B2	1	C	2.8	1.5	C			1.2	0.63
		2	F	1.5	0.1	C			0.6	0.04
		3	F	2.0	0.1	C			0.8	0.04
		4	F	6.0	0.1	C			2.5	0.04
		5	F	7.0	0.1	C			2.9	0.04
		6	F	4.0	0.1	C			1.7	0.04
		7	F	7.5	0.1	C			3.1	0.04
		8	F	2.8	0.1	C			1.2	0.04
		9	F	1.5	0.1	C			0.6	0.04
		10	M	2.5	0.1	C			1.0	0.04
		11	F	2.5	0.3	C			1.0	0.13
		12	M	3.0	0.2	C			1.3	0.08
		13	F	1.5	0.1	C			0.6	0.04
		14	F	2.2	0.15	C			0.9	0.06
		15	F	2.5	0.1	C			1.0	0.04
		16	F	4.5	0.1	C	C	photo	1.9	0.04
		17	F	2.2	0.1	C			0.9	0.04
		18	F	10.5	0.1	C			4.4	0.04
		19	F	2.5	0.1	C			1.0	0.04
		20	F	2.0	0.1	C			0.8	0.04
		21	F	1.5	0.1	C			0.6	0.04
		22	C	3.0	1.5	C			1.3	0.63
		23	F	2.8	0.1	C			1.2	0.04
		24	F	8.0	0.1	C			3.3	0.04
		25	B	7.0	0.8	C			2.9	0.33
	D4	26	F	1.5	0.1	C			0.6	0.04
		27	F	5.0	0.1	C			2.1	0.04
		28	M	3.0	0.1	C			1.3	0.04
		29	F	2.0	0.1	C			0.8	0.04
		30	F	2.0	0.1	C			0.8	0.04
		31	B	5.0	0.5	C			2.1	0.21
		32	F	2.0	0.1	C			0.8	0.04
		33	B	29.0	0.7	C			12.1	0.29
		34	F	3.5	0.1	C			1.5	0.04
		35	B	4.5	0.25	C			1.9	0.10

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0839	Amt Prepped(cm ²):	0.1
Client I.D.:	08.VA	Filter Area (mm ²):	1256
Instrument:	Philips 120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	4
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	8/1/2007
Page:	2 of 4
Comments:	0.1 ml
ASTM Method:	D6480
or D5755	X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (µm)	Width*** (µm)
1	D4	36	M	1.9	0.1	C			0.8	0.04
		37	F	1.7	0.1	C			0.7	0.04
		38	F	6.5	0.1	C			2.7	0.04
		39	F	2.5	0.1	C			1.0	0.04
		40	F	7.0	0.2	C			2.9	0.08
		41	F	5.5	0.15	C			2.3	0.06
		42	F	5.0	0.1	C			2.1	0.04
		43	F	2.0	0.1	C			0.8	0.04
		44	F	3.5	0.1	C			1.5	0.04
		45	F	27.0	0.1	C			11.3	0.04
		46	F	3.5	0.1	C			1.5	0.04
		47	F	3.6	0.1	C			1.5	0.04
		48	F	3.6	0.1	C			1.5	0.04
		49	F	4.6	0.1	C			1.9	0.04
		50	F	5.5	0.1	C			2.3	0.04
		51	F	9.0	0.1	C			3.8	0.04
		52	F	4.5	0.1	C			1.9	0.04
		53	F	1.5	0.1	C			0.6	0.04
	G6	54	M	4.5	0.1	C			1.9	0.04
		55	F	7.5	0.1	C			3.1	0.04
		56	F	1.5	0.1	C			0.6	0.04
		57	F	6.0	0.1	C			2.5	0.04
		58	F	2.5	0.15	C			1.0	0.06
		59	F	10.1	0.1	C			4.2	0.04
		60	F	21.5	0.1	C			9.0	0.04
		61	F	4.5	0.1	C			1.9	0.04
		62	F	11.5	0.1	C			4.8	0.04
		63	F	5.6	0.1	C			2.3	0.04
		64	B	3.5	0.2	C			1.5	0.08
		65	F	9.5	0.1	C			4.0	0.04
		66	F	3.0	0.1	C			1.3	0.04
		67	F	26.0	0.1	C			10.8	0.04
		68	F	9.0	0.1	C			3.8	0.04
		69	F	1.5	0.2	C			0.6	0.08
		70	F	3.5	0.1	C			1.5	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0839	Amt Prepped(cm ²):	0.1
Client I.D.:	08.VA	Filter Area (mm ²):	1256
Instrument:	Philips 120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	4
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	8/1/2007
Page:	3 of 4
Comments:	0.1 ml
ASTM Method:	D6480
	or D5755 <input checked="" type="checkbox"/>

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	G6	71	B	6	0.4	C			2.5	0.17
		72	B	3.0	0.25	C			1.3	0.10
		73	B	3.0	0.2	C			1.3	0.08
		74	F	5.5	0.1	C			2.3	0.04
		75	F	1.5	0.1	C			0.6	0.04
		76	F	1.5	0.2	C			0.6	0.08
		77	F	2.0	0.1	C			0.8	0.04
		78	F	1.5	0.1	C			0.6	0.04
		79	F	2.5	0.1	C			1.0	0.04
		80	B	3.5	0.2	C			1.5	0.08
		81	F	2.0	0.15	C			0.8	0.06
		82	F	2.0	0.1	C			0.8	0.04
		83	F	2.1	0.1	C			0.9	0.04
		84	F	3.0	0.1	C			1.3	0.04
		85	F	3.5	0.1	C			1.5	0.04
		86	F	1.5	0.1	C			0.6	0.04
		87	F	1.5	0.1	C			0.6	0.04
		88	F	2.0	0.1	C			0.8	0.04
	J5	89	F	4.6	0.1	C			1.9	0.04
		90	F	2.1	0.1	C			0.9	0.04
		91	F	1.5	0.1	C			0.6	0.04
		92	F	2.5	0.1	C			1.0	0.04
		93	B	11.0	0.3	C			4.6	0.13
		94	F	7.0	0.1	C			2.9	0.04
		95	F	11.0	0.1	C			4.6	0.04
		96	B	3.5	0.3	C			1.5	0.13
		97	M	1.5	0.1	C			0.6	0.04
		98	F	5.5	0.1	C			2.3	0.04
		99	M	2.5	0.1	C			1.0	0.04
		100	F	3.6	0.1	C			1.5	0.04
		101	B	6.5	0.25	C			2.7	0.10
		102	F	2.0	0.1	C			0.8	0.04
		103	M	4.0	0.1	C			1.7	0.04
		104	F	3.0	0.1	C			1.3	0.04
		105	F	1.5	0.1	C			0.6	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS
Surface Dust Sample Analysis Sheet

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0840	Amt Prepped(cm ²):	1
Client I.D.:	09.VA	Filter Area (mm ²):	1256
Instrument:	Philips 120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	9
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

Analyst:	WH
Date:	8/1/2007
Page:	1 of 2
Comments:	1.0 ml
ASTM Method:	D6480
	or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (µm)	Width*** (µm)
1	A5	1	C	6.5	2.5	C			2.7	1.04
		2	B	3.0	0.2	C			1.3	0.08
		3	F	4.6	0.15	C			1.9	0.06
		4	F	4.6	0.2	C			1.9	0.08
		5	F	4.4	0.1	C			1.8	0.04
		6	F	2.5	0.1	C			1.0	0.04
		7	F	1.8	0.1	C			0.8	0.04
		8	F	2.0	0.1	C			0.8	0.04
	C7	9	B	7.0	0.5	C	C	photo	2.9	0.21
		10	F	6.0	0.1	C			2.5	0.04
		11	F	2.0	0.1	C			0.8	0.04
		12	F	1.5	0.1	C			0.6	0.04
		13	M	2.5	0.1	C			1.0	0.04
		14	F	2.0	0.1	C			0.8	0.04
	D4	15	F	30.0	0.15	C			12.5	0.06
		16	F	11.5	0.1	C			4.8	0.04
		17	C	4.5	1.8	C			1.9	0.75
		18	F	1.8	0.1	C			0.8	0.04
		19	C	12.5	6	C			5.2	2.50
		20	F	5.0	0.1	C			2.1	0.04
		21	F	2.5	0.1	C			1.0	0.04
		22	B	5.0	0.5	C			2.1	0.21
	F1	23	F	6.0	0.1	C			2.5	0.04
		24	F	2.0	0.1	C			0.8	0.04
		25	F	2.5	0.1	C			1.0	0.04
		26	F	4.1	0.1	C			1.7	0.04
		27	M	3.0	0.3	C			1.3	0.13
	H8	28	M	5.0	0.1	C			2.1	0.04
		29	F	2.0	0.1	C			0.8	0.04
		30	F	3.0	0.1	C			1.3	0.04
		31	F	2.0	0.1	C			0.8	0.04
		32	F	4.0	0.1	C			1.7	0.04
		33	F	2.5	0.1	C			1.0	0.04
2	C2	34	F	3.5	0.1	C			1.5	0.04
		35	F	1.5	0.1	C			0.6	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA Project#	5394	Amt Collected(cm ²):	100
MVA Sample#	S0840	Amt Prepped(cm ²):	1
Client I.D.:	09.VA	Filter Area (mm ²):	1256
Instrument:	Philips 120	Filter Type:	PC
Magnification:	24,000	Openings Analyzed:	9
Acc. Voltage:	100	Grid Opening (mm ²):	0.009

or D5755 \overline{X}

5394report082907_744P

Analyst: WH
Date: 8/1/2007
Page: 1 of 1
Comments: 0.1 ml
ASTM Method: D6480
or D5755 X

5394report082907 744P